U.S. Department of the Interior Bureau of Land Management Kremmling Field Office P O Box 68 Kremmling, CO 80459

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-120-08-63-EA

PROJECT NAME: Diversified Application for Permit to Drill (APD) and Right-of-Way (ROW)

<u>LEGAL DESCRIPTION</u>: T. 7 N., R. 81 W., Sec. 23:

T. 7N., R. 81W., Sec. 36: NW1/4NW1/4

Jackson County

<u>APPLICANT</u>: Diversified Operating Corporation (Diversified)

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

<u>Background</u>: The Federal mineral estate administered by the Bureau of Land Management (BLM) as part of its mineral leasing program provides minerals, including fossil fuels, for the benefit and use of the American public and encourages development of domestic oil and gas reserves to reduce dependence on foreign energy supplies. Mineral development is supported by the Mineral Leasing Act (1920 30 USC 181 et. seq.) and the Federal Land Policy and Management Act (FLPMA).

An Application for Permit to Drill (APD) the Federal Coalmont 23-12 well was received on 6/23/08. An application for a right-of-way (ROW) for State-Federal 36-3 was received on 5/15/08. An on-site review of the proposed well sites occurred prior to the APD and ROW submission on 5/29/08. BLM Kremmling Field Office (KFO) staff at the on-site examination included: Bill Wyatt, Archeologist; Paula Belcher, Hydrologist; Megan McGuire, Wildlife Biologist; Mandy Scott; Natural Resource Specialist, Joe Stout, NEPA Coordinator; Susan Cassel, Realty Specialist; and Kelly Hodgson; Natural Resource Specialist. Terry Cammon represented Diversified.

The proposed Federal Coalmont 23-12 well site location is on split-estate lands, with federal minerals and private surface. The surface land owner was invited to the on-site review, but declined to attend. BLM's NEPA responsibilities on split-estate lands are basically the same as for Federal surface. The fact that impacts would occur on private surface does not diminish our responsibility to consider alternatives or our authority to impose mitigation measures since the impacts would be caused as a direct consequence of activity approved by BLM and conducted pursuant to a Federal oil and gas lease.

<u>PROPOSED ACTION</u>: Diversified Operating Corporation (Diversified) proposes to drill two new oil wells in Jackson County during the fall of 2008.

The Federal Coalmont 23-12 well would be located in T. 7 N., R. 81 W., Sec. 23 NWSW. The well site would be located on BLM-administered mineral estate and private surface (see map below). The standard Conditions of Approval are incorporated as part of the Proposed Action and included as Attachment #1. The design features developed during on-site inspections are described below, and incorporated as part of the Proposed Action. Additionally, the surface-use plans provided by Diversified are incorporated by reference as part of the Proposed Action.

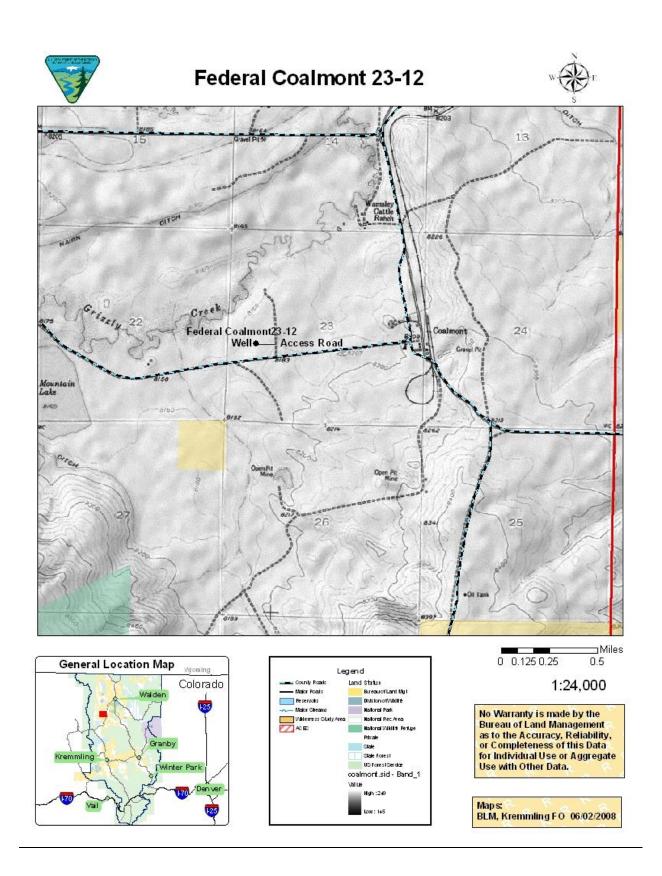
Surface disturbance expected from developing the well is shown in the following chart, based on pit dimensions, finished pad grade elevations, and topography. The well site would be located on privately owned surface and would therefore require a surface use agreement from the landowner.

Well	Well pad Disturbance (Acres)	Max Vertical Cut (ft.)	Cut/Fill Slope grades	Existing Hillside Slope (approx.)	New Road disturbance (Lin. ft.)	Road Disturbance area (Acres)	Total site disturbance (Acres)
Federal Coalmont 23-12	2.5	*6	2:1	1.8-2%	370'	0.3	2.8

^{*}Note: The cut depth is the total pit depth and is not reflective of the true cut and fill for the pads (i.e. the maximum cut for the Federal Coalmont 23-12 pad would be 4.5 ft, with the pit then constructed within the cut area.)

Additional details of the well sites include the following:

- Well pad dimensions would be approximately 330' x 330'.
- Access to well pad would utilize an existing 18' x 370' road. If well proves productive, then the existing road would be widened to provide 25' of driving surface, and be graveled, improved, and maintained as necessary.
- Post drilling production would include partial pad reclamation, reducing the pad area, as well as a reduction in the cut and fill slope angle of repose for long-term stability.
- Crowning and ditching of the access road is all that is anticipated. A small amount of gravel would be used on the access roads.
- A road grader and possibly a D6-D7 bulldozer would be used to level the location for drilling operations.
- If the well is completed as a producing oil well, the facilities would include an artificial lift system (probably a rod pumping unit), with a prime mover, a heated 3-phase treater and possibly 2-phase separator, and water and oil storage tanks.



The State-Federal 36-3 well ROW would be located in T. 7 N., R. 81 W., Sec. 36 NWNW. The well site would be located on BLM-administered surface and State mineral estate. An APD has been submitted to the State of Colorado. This is a directional drill well to the southeast part of Section 36. The design features are incorporated as part of the Proposed Action. Additionally, the surface-use plans provided by Diversified are incorporated by reference as part of the Proposed Action. Surface disturbance expected from developing the well is shown in the following chart, based on pit dimensions, finished pad grade elevations, and topography.

Well	Well pad Disturbance (Acres)	Max Vertical Cut (ft.)	Cut/Fill Slope grades	Existing Hillside Slope (approx.)	New Road disturbance (Lin. ft.)	Road Disturbance area (Acres)	Total site disturbance (Acres)
State Federal 36-3	2.5	*6	2:1	1%	300'	0.124	2.62

^{*}Note: The cut depth is the total pit depth and is not reflective of the true cut and fill for the pads (i.e. the maximum cut for the State Federal 36-3 pad would be 2.3 ft, with the pit then constructed within the cut area.)

Additional details of the well sites include the following:

- Well pad dimensions would be approximately 330' x 330'.
- The new access road to the well pad would be 18' x 300' coming off of JCR 26B. If well proves productive, then the existing road would be widened to provide 25' of driving surface, and be graveled, improved, and maintained as necessary.
- Post drilling production would include partial pad reclamation, reducing the pad area, as well as a reduction in the cut and fill slope angle of repose for long-term stability.
- Crowning and ditching of the access road is all that is anticipated. A small amount of gravel would be used on the access roads.
- A road grader and possibly a D6-D7 bulldozer would be used to level the location for drilling operations.
- If the well is completed as a producing oil well, the facilities would include an artificial lift system (probably a rod pumping unit), with a prime mover, a heated 3-phase treater and possibly 2-phase separator, water and oil storage tanks.

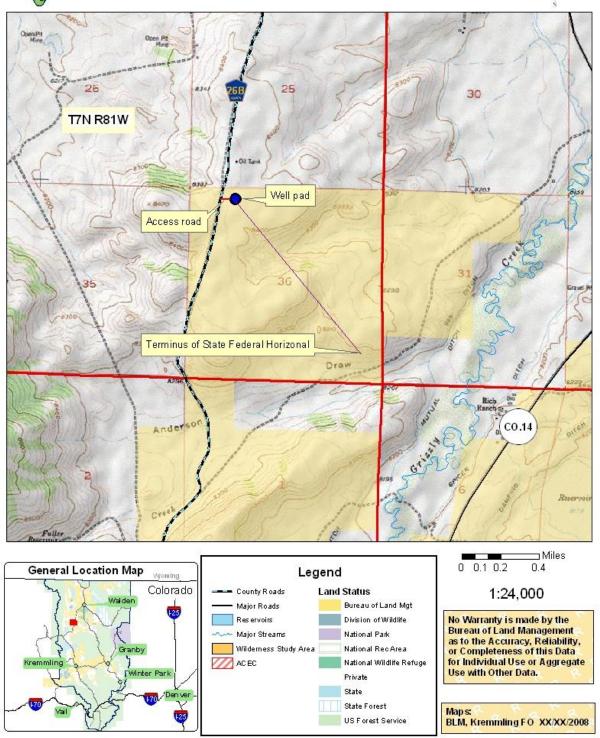
Design Features of the Proposed Action (Applies to the APD and ROW):

- Any long-term topsoil piles stored longer than one year would be seeded. Topsoil must be of an adequate volume to spread to a 4-inch depth at final reclamation.
- Topsoil should be separated and stockpiling should not occur on the western side of the pad. Vegetation should be scraped simultaneously with the topsoil if the topsoil is stockpiled for more than 6 months.
- Diversified must obtain a storm-water permit or waiver from the state prior to drilling.
- The attached seed mix would be used for reclamation (Attachment #2).



Diversified State Federal 36-3





<u>No Action Alternative:</u> The No Action Alternative would deny Diversified the proposed well-site developments and the associated access roads. Although the Federal Coalmont 23-12 APD could be denied, the lease held by Diversified grants the right of development. Thus, an APD for another location on the lease could be submitted in place of the Federal Coalmont 23-12 APD, if it were denied.

PURPOSE AND NEED FOR THE ACTION: The BLM received an APD from Diversified for the proposed Federal Coalmont 23-12 well located on private surface/BLM-administered mineral estate and a ROW application for the State Federal 36-3 well located on BLM-administered surface and State mineral estate to explore for and develop oil and gas reserves in the United States. Lease development was essentially guaranteed when the leases were issued [Mineral Leasing Act of 1920, 30 USC 181 et. seq., as amended, and the Federal Land Policy and Management Act (FLPMA)]. Federal leases are issued for an initial term of 10-years and are valid indefinitely as long as capability to produce in paying quantities is maintained, either on a leasehold basis or on a unit basis (if the lease is contained in an approved oil/gas unit).

The BLM is preparing the Environmental Assessment (EA) to address potential impacts associated with approval of Diversified's applications. If approved, they would further BLM's objective contained in the 1991 Oil and Gas Leasing and Development EIS/ROD to: "Facilitate orderly, economic, and environmentally-sound exploration and development of oil and gas resources using balanced multiple-use management.

It is the intent of the applicant to exercise their lease rights to occupy as much of the lease surface as is reasonable for exploration and extraction of oil and gas.

<u>PLAN CONFORMANCE REVIEW</u>: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3): The Proposed Action is subject to the following plan:

Name of Plan: Kremmling Resource Management Plan, Record of Decision (ROD)

<u>Date Approved</u>: December 19, 1984 (Updated June 1999), and as amended by Record of Decision on December 5, 1991 as described in the Colorado Oil and Gas Leasing and Development Final Environmental Impact Statement (O&G EIS).

Decision Number/Page: ROD (map 3, p. 14)

<u>Decision Language</u>: To facilitate orderly, economic and environmentally sound exploration and development of oil and gas resources using balanced multiple-use management (ROD, p.11). Important wildlife habitat will be protected with the use of no surface occupancy, timing limitations or controlled surface use stipulations and /or lease notices on oil and gas leases, and conditions of approval (COA) on permits (ROD, p. 3).

Decision Number/Page: II-B-12 pg.14

<u>Decision Language</u>: Decision Language: Provide the opportunity to utilize public lands for development of facilities which benefit the public, while considering environmental and agency concerns.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

Standard	Definition/Statement
#1 Upland Soils	Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.
#2 Riparian	Riparian systems associated with both running and standing water, function properly and have
Systems	the ability to recover from major surface disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.
#3 Plant and	Healthy, productive plant and animal communities of native and other desirable species are
Animal	maintained at viable population levels commensurate with the species and habitat's potential.
Communities	Plants and animals at both the community and population level are productive, resilient,
	diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological
	processes.
#4 Threatened and	Special status, threatened and endangered species (federal and state), and other plants and
Endangered	animals officially designated by the BLM, and their habitats are maintained or enhanced by
Species	sustaining healthy, native plant and animal communities.
#5 Water Quality	The water quality of all water bodies, including ground water where applicable, located on or
	influenced by BLM lands will achieve or exceed the Water Quality Standards established by
	the State of Colorado. Water Quality Standards for surface and ground waters include the
	designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation
	requirements set forth under State law as found in (5 CCR 1002-8), as required by Section
	303(c) of the Clean Water Act.

Because a standard exists for these five categories, a finding must be made for each of them in the environmental analysis. These findings are located in specific elements below or in the Interdisciplinary Team Analysis Review Record and Checklist (IDT-RRC) (Appendix 1).

<u>AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION</u> MEASURES:

<u>CRITICAL ELEMENTS</u>: The following critical elements: Areas of Critical Environmental Concern, Cultural Resources, Environmental Justice, Native American Religious Concerns, Farmlands- Prime and Unique, Floodplains, Invasive/Non-native species, Wastes- Hazardous or Solid, Wetlands and Riparian Zones, Wild and Scenic Rivers, and Wilderness were evaluated and determined that they were not present or that there would be no impact to them from the Proposed Action or No Action Alternative. See IDT-RRC in Appendix 1 for further information.

The following critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

Impacts associated with implementation of the No Action Alternative would be similar to impacts disclosed for the Proposed Action since development would occur in new locations on the proposed lease parcel, unless otherwise stated in specific sections below.

AIR QUALITY

Affected Environment: Air quality in the North Park area is generally good, with some winter inversions in the center of the area around Walden. The North Park area is surrounded by several Class I Air Quality Areas (i.e. areas requiring the most stringent air pollution controls). Prevailing winds in the area are from the west-southwest. There is currently one well flaring gas in the vicinity of these proposed wells, approximately 3.5 miles east of well #23-12 and 2.5 miles northeast of well #36-3.

Environmental Consequences: The Proposed Action would result in localized short-term increases in carbon monoxide, nitrogen dioxide, ozone, and sulfur dioxide concentrations, but well below applicable ambient air quality standards. Hazardous air pollutant concentrations would be well below standards and the related short and long term cancer risks to well rig operators and nearby residents would be below significance levels. Minor adverse impacts to air quality would result in the immediate vicinity of the well development. These impacts would include dust or odors from oil and gas operations that can be irritable to individuals with chemical sensitivities or breathing difficulties. Since the oil and gas development would occur approximately 15 miles south of Walden, these impacts would not affect town residents or visitors.

The Wamsley Cattle Rich ranch is located about 0.7 miles northeast of well #23-12 and a few homes are east of the well, about 0.5 miles away. The homes are less at risk due to the prevailing wind patterns and being slightly higher in elevation than the well. Well #36-3 is also about a half mile southeast of Coalmont, with prevailing winds carrying any well emissions away from the homes. There are no other known residences within a mile of well #36-3. At the current well density, the wells would not be expected to produce sufficient concentrations to impact the home or ranch.

Construction of the pads would create some fugitive dust, depending on the soil moisture and weather at the time. The wells are located east of the nearest highway. Well #23-12 is north of the main county road and Well #36-3 is east of the main county road. It is unlikely that dust

control to insure traffic safety would be necessary due to the prevailing wind patterns. The small amount of dust and its short duration would not impact air quality in the area.

MIGRATORY BIRDS

Affected Environment: The proposed well sites would be located in sagebrush steppe habitat. Migratory birds expected to inhabit the project sites include Sage Sparrows, Horned Larks, Western Kingbirds, Common Nighthawks, Green-tailed Towhees, Red-tail Hawks, Prairie Falcons, Western Bluebirds, American Kestrals, Burrowing owls, Swainson's hawks, and golden eagles.

Environmental Consequences: The proposed project would eliminate a small amount of sagebrush habitat. However, no take of migratory species or active nests would be expected to occur as a result of the project. The reclamation plan, which would be implemented after project completion, would adequately restore most of the sagebrush habitat lost due to the project's construction activities. Accordingly, the Proposed Action would not have any major direct, indirect, or cumulative impacts on migratory birds.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment: The Proposed Action is located within the North Platte River basin, which is tributary to the Platte River System. The United States Fish and Wildlife Service (FWS) has determined that any water depletion within the Platte River jeopardizes the continued existence of one or more federally-listed threatened or endangered species and adversely modifies or destroys designated and proposed critical habitat. Depletions may affect and are likely to adversely affect the whooping crane, the interior least tern, the piping plover, and the pallid sturgeon in Nebraska.

The proposed well sites would be located in habitat occupied by Greater sage-grouse, a BLM designated sensitive species. While sage-grouse occupy the project area on a yearlong basis, the area is especially important as nesting and brood rearing for sage-grouse. Three sage-grouse breeding complexes (referred to as leks) are located at 0.8, 1.2, and 1.4 miles from well #23-12 and 0.6, 1.4, and 1.5 miles well #36-3. The sagebrush habitat adjoining the leks provides hiding and nesting cover for sage-grouse during the breeding season.

No other threatened, endangered or sensitive species are known to inhabit the proposed project area.

Environmental Consequences: The Platte River Recovery Implementation Program (PRRIP), established in 2006, is implementing actions designed to assist in the conservation and recovery of the target species and their associated habitats along the central and lower Platte River in Nebraska through a basin-wide cooperative approach agreed to by the States of Colorado, Nebraska, and Wyoming and the U.S. Secretary of the Interior. The program addresses the adverse impacts of existing and certain new water related activities on the Platte target species and associated habitats, and provides Endangered Species Act (ESA) compliance for effects to the target species and whooping crane critical habitat from such activities including avoidance of any prohibited take of such species. The State of Colorado is in compliance with its obligations under the Program.

The two proposed wells are estimated to require .2 acre-ft of water per well. The operator is responsible for securing a legal water source for this water. If the water source is from a private irrigation ditch, then the depletion would be part of the existing agricultural uses of Jackson County. Jackson County has joined the South Platte Water Related Activities Program, Inc. (SPWRAP) on behalf of all private land owners in the county to cover existing water depletions from irrigation practices. If the water source is not associated with an irrigation water right, then the applicant would need to join SPWRAP to mitigate the potential impacts from the depletion.

Since vegetative loss from the proposed well sites development would occur, a small amount of sage-grouse nesting habitat would be impacted by the proposed project. Most of this habitat would be restored when the well site pads are successfully reclaimed with native vegetation. The distance from the proposed well sites to the leks, located less than 2-miles away, may also cause conflicts between breeding sage-grouse and drilling activities, including decreased attendance on the lek sites, and decreased nest success. To assure no conflicts with nesting sage-grouse, the following mitigation is proposed.

Mitigation:

- Operator should provide the water source to be used for the wells. If the water source is not associated with an irrigation water right, then the applicant would need to join South Platte Water Related Activities Program to mitigate the potential impacts from the depletion.
- If Diversified's drilling activity does not occur in the planned timeframe (September-October 2008), they would be required to consult with the BLM to discuss potential sagegrouse issues during the period of March 1 through June 30.

Finding on the Public Land Health Standard for Threatened & Endangered species: Based on the field visit during the onsite, and that such a small area is affected, neither the Proposed Action or the No Action Alternative would affect the area's ability to meet Standard 4.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The proposed wells are in the Upper North Platte River 5th Order watershed. Well #23-12 is located on a bench overlooking Little Grizzly Creek about 1,200 feet to the northwest of the well. There are no public land segments on Little Grizzly Creek.

Well #36-3 is along a bench that divides the Little Grizzly Creek and Grizzly Creek watersheds. Public segments of Grizzly Creek are located upstream of the well.

The state classifies Little Grizzly and Grizzly Creek for coldwater class 1 aquatic life, water supply, agriculture, and primary contact recreation. Both streams are on the Monitoring and Evaluation List for possible water quality impairment for aquatic life uses. In addition to this, Little Grizzly Creek is listed for E coli and total recoverable iron as possible impairments. The Monitoring and Evaluation List identifies water bodies where there is reason to suspect water quality problems, but there is also uncertainty regarding one or more factors, such as the representative nature of the data. Water bodies that are impaired, but it is unclear whether the

cause of impairment is attributable to pollutants as opposed to pollution, are also placed on the Monitoring and Evaluation List.

Ground water information is limited in the area. Three well permits have been issued in Township 7 N., R. 81 W. Section 23 and 2 well permits in Township 7 N., R. 80 W. Section 30. Unfortunately, the private land owners who obtained these permits to drill wells have never filed drill logs with the state, or filed on water rights. Without these filings, it is difficult to know if the wells were drilled and to what depth. Most water wells in North Park are associated with the alluvial valleys and are shallow in depth. There is a water right associated with a well in the SENE of Section 23. The well is used for domestic and stock water and has a water right for 0.033 cubic-feet-per-seconds (cfs). It would appear that the proposed well in Section 23 is located down gradient from this water well.

Environmental Consequences: The proposed well pads and access roads are both located on benches, with little cut and fill due to the flat surfaces. If any runoff leaves the 23-12 site, it would travel to the northwest to Little Grizzly Creek about 1,200 feet away. Any runoff generated by the 36-3 site would travel to the northeast approximately 2.5 miles to Grizzly Creek. Prior to reaching Grizzly Creek, the 969 irrigation ditch and laterals would intercept any runoff that travelled the distance.

Both wells would disturb more than 1 acre and require a stormwater permit (or waiver) from the state of Colorado. It is the applicant's responsibility to obtain the permit and to implement all required best management practices to protect water quality and reduce nonpoint source pollution. In addition to the state's requirements, the BLM requires that the outer edge of the pad be a dirt berm and that the reserve pit be lined to further protect water quality (see Attachment #1). The operator is responsible for securing legal water to be used during the drilling and completion of the well.

Finding on the Public Land Health Standard for water quality: The proposed wells and access roads are located on fairly flat terrain and do not pose high erosional risks. With best management practices, the Proposed Action would not affect the area's ability to meet the Standard.

WASTES- HAZARDOUS OR SOLID

Affected Environment: Some potentially hazardous materials would be used during well drilling and maintenance. In addition, solid waste would be generated during these proposed activities.

According to 29 CFR 1910.1200(g), the oil and gas operator is to maintain a file containing Material Safety Sheets (MSDS) for all chemicals, compounds, and/or substances which are utilized during the course of construction, drilling, completion, and production operations of this project. This file is to be available at all times employees are present at the site. Hazardous materials that may be present at the site include drilling mud and cementing products that are primarily inhalation hazards. Flammable or combustible motor fuels would be present. Proprietary materials necessary for well completion and simulation such as acids and corrosives are often used. Human solid and liquid wastes would be generated primarily during the construction and drilling phases of the project.

Environmental Consequences: There would be no direct, indirect, or cumulative impacts from the Proposed Action. However, this is dependent upon responsible use of chemicals and immediate containment and adequate cleanup in the event of a release. Consequences would be dependent on the volume and nature of the material released. In most situations involving hazardous materials, there are ways to remediate the area that has been contaminated. The operator is required to immediately contact BLM KFO, remove all free oil, and coordinate with the BLM in cleanup and bioremediation operations (see Attachment #1).

<u>NON-CRITICAL ELEMENTS</u>: The following non-critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

SOILS (includes a finding on Standard 1)

Affected Environment: Soil information is from the Jackson County Soil Survey. No site verification has been done for either drill site.

Well #23-12 is mapped as being in the Coalmont-Fluetsch complex, which is generally 50% Coalmont loam and 30% Fluetsch sandy loam, and 20% Cryothernts. Coalmont loams formed in material weathered from Coalmont shale and tend to support only low alkali sagebrush, while the Fluetsch soils will support big sagebrush. The Fluetsch soils tend to occur as narrow bands within the Coalmont, giving a banded appearance to the terrain. Coalmont soils have a 4-inch layer of loam soil underlain by clay. Depth to shale bedrock varies between 20-40 inches from the surface. This claypan range site has slow permeability and low plant available water, while the Fluetsch valley bench sites have moderate permeability and high plant available water. The complex has medium to rapid runoff with only moderate hazards of water erosion. Wind erosion for the site is rated as slight.

Well #36-3 is mapped as occurring on Cabin sandy loam soils. They formed in gravelly alluvium with the "A" horizon having 5-20% coarse fragments. At a depth of about 2-feet, the soil textures are very gravelly sand and may contain 70% gravel. The top 2-feet of soil has moderate permeability, with underlying layers having rapid permeability. Plant available water throughout the profile is low. Runoff is medium and the hazard of soil blowing is severe.

Environmental Consequences: Due to the soils, both sites have more sparse vegetative cover. Minimizing the amount of surface disturbance and careful handling of the topsoil would help in the reclamation of the sites. The Proposed Action contains design features aimed at minimizing impacts to soils. If implemented, there would be minimal impacts to soil resources.

Finding on the Public Land Health Standard for upland soils: The proposed action may impact 5.4 acres of soil, but on a landscape scale, would not affect the area's ability to meet the Standard for Upland Soils. The conditions of approval, stipulations, and mitigative measures would help the two pads and roads have minimal impact to soils.

VEGETATION (includes a finding on Standard 3)

Affected Environment: In general, the vegetation found at both well sites is a mixture of sagebrush with an under story of grasses and forbs. The common grasses found in the area are fescues, wheat grasses, needle grasses, and bluegrasses. Common forbs found in the area are lupine species, phlox species, and larkspur species.

Environmental Consequences: The total disturbance for the proposed well site and new road would be an estimated 5.4 acres. Thus, there would be minor direct impacts in the form of vegetation loss as a result of the Proposed Action. However, with the proposed reclamation utilizing native species seed mix (Attachment #2), there would be minimal indirect and cumulative impacts to vegetation.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Allotment # 07067 (Section 36) was not assed for standards. Custodial allotments have a low forage production potential, minimal conflicting resources or public lands that have been designated for disposal. Therefore, compliance with the Standards for Public Land Health in Colorado was not analyzed.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed wells would be constructed in sagebrush steppe habitat which is occupied by a variety of terrestrial wildlife. Mule deer and Rocky Mountain elk move through the project area at various times in the year en-route to summer and winter range. Pronghorn and small mammals including badgers, coyotes, and a variety of small rodents inhabit the area on a yearlong basis.

Environmental Consequences: The proposed project is not expected to conflict with terrestrial wildlife, since habitat disturbance would be minimal. Most vegetative disturbances associated with the project would be reclaimed. Harassment or disturbance of wildlife would also be minimal since drilling activities would be short-term in isolated areas, and not likely to occur during periods of animal concentration (i.e. winter months). Animals may temporarily avoid the project area during and after operations due to noise, increased activity, and unfamiliar surroundings. The Proposed Action would not result in any major direct, indirect or cumulative impacts to the area's terrestrial wildlife.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Based on the field visit during the onsite, and that such a small area is affected, neither the Proposed Action or the No Action Alternative would affect the area's ability to meet Standard 3.

NOISE

Affected Environment: Sound levels in the project area would vary greatly, depending on proximity to existing residences, roadways, or other sources. These sound levels would fluctuate with variations in weather conditions including temperature, wind, humidity, and the general topography of the area. No background noise studies have been conducted, but the project area is located in the vicinity of the town of Walden and existing county roads, with noise disturbance already present to a degree.

Environmental Consequences: There would be a short-term increase in noise levels in the Proposed Action while drilling. The distance to existing roads, the temporary nature of the road construction and maintenance, drilling noise, and the use of quiet electric motors and well lubricated pumpjacks would limit any harmful effects of noise occurring as a result of the Proposed Action.

<u>CUMULATIVE IMPACTS SUMMARY</u>: The geographic scope for the cumulative impact analysis is Jackson County. The 1991 Colorado Oil and Gas Leasing Final Environmental Impact Statement (O&G EIS) forecasted, for Kremmling Field Office, a total of 225 wells, of which 108 development and wildcat wells would be drilled on BLM lands (Appendix B, B20 & 21). Cumulative impacts for this forecasted development were analyzed in the O&G EIS based upon oil and gas surface disturbance totaling 2,044 acres (Appendix B-2).

In regards to past actions regarding oil and gas activity, oil and gas was first discovered in northeastern Jackson County in 1926 by Continental Oil Company. This discovery marked the beginning of oil and gas development in the North McCallum Field. In 1952, oil was discovered in the Coalmont area southwest of Walden. Since that time, 13 fields have been discovered and developed, all in the North Park (Jackson County) area. Within these 13 fields, approximately 475 wells have been completed and approximately 50% of these wells were completed as dry holes.

There are currently 109 active wells in the KFO of which 84 occur within the McCallum fields. In looking at the actual surface disturbance that has occurred from oil and gas development, there has been approximately 2-3 acres of surface disturbance/per well instead of the 19 acres that was analyzed in the 1991 RMP Amendment/EIS. Thus, there has been approximately 327 acres of disturbance associated with the current active wells.

In regards to present actions, there has been recent interest in the Coalmont Niabrara formation in southern Jackson County. To date, there have been 3 wells drilled on private surface.

In regards to future actions, there are approximately 10 additional wells planned for development within the Jackson County. When added to the impacts of all of the other actions in Jackson County, the cumulative impacts from this proposal are well within the 1% cumulative surface impacts projected for the Resource Area in the O&G EIS.

<u>PERSONS / AGENCIES CONSULTED</u>: The proposed project was listed on the Kremmling Field Office internet NEPA register and NEPA public room board. No comments were received from the public.

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

FONSI

CO-120-2008-63 EA

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the Proposed Action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

DECISION RECORD

<u>DECISION</u>: It is my decision to authorize the Proposed Action as described in the attached EA. This decision is contingent on meeting all mitigation measures and monitoring requirements listed below.

<u>RATIONALE</u>: The Proposed Action will allow for energy exploration in an environmentally sound manner. The design features of the Proposed Action, mitigation measures included below, and attached Conditions of Approval will ensure that the applicable natural resources are adequately protected.

MITIGATION MEASURES:

Sensitive Species:

- If Diversified's drilling activity does not occur in the planned timeframe (September-October 2008), they must consult with the BLM to discuss potential sage-grouse issues during the period of March 1 through June 30.
- Operator must provide the water source to be used for the wells. If the water source is not associated with an irrigation water right, then the applicant will need to join South Platte Water Related Activities Program to mitigate the potential impacts from the depletion.

<u>COMPLIANCE/MONITORING</u>: The right-of-way will be inspected and monitored periodically during terms of the grant to ensure compliance with the terms and conditions of the grant. The right-of-way will also be inspected after any maintenance activities to determine compliance with and effectiveness of reclamation measures.

NAME OF PREPARER: Kelly Hodgson and Susan Cassel

NAME OF ENVIRONMENTAL COORDINATOR: Joe Stout

DATE: 9/17/08

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ David Stout

DATE SIGNED: 9/17/08

ATTACHMENTS:

- Standard Conditions of Approval
 Seed Mix

APPENDICES:

Appendix 1 – Interdisciplinary Team Analysis Review Record and Checklist

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: Diversified Application for Permit to Drill (APD) and Right of Way (ROW)

Project Leader: Kelly Hodgson

Consultation/Permit Requirements:

Consultation	Date	Date	Responsible	Comments
	Initiated	Completed	Specialist/	
			Contractor	
Cultural/Archeological	7/24/08	8/9/08	BBW	No effect, there are no historic properties that
Clearance/SHPO				would be affected.
Native American	6/3/08	7/4/08	BBW	To date, no Native American tribe has
				identified any areas of traditional concern.
T&E Species/FWS	N/A	N/A	M.McGuire	
Permits Needed (i.e.			Applicant	During the on-site, the applicant was
Air or Water)				reminded that a stormwater permit would be
				required from the state.

(NP) = Not Present

(NI) = Resource/Use Present but Not Impacted

(PI) = Potentially Impacted and Brought Forward for Analysis.

NP	Discipline/Name		Date	Initia	Review Comments (required for Critical
NI			Review	ls	Element NIs, and for elements that require a
PI			Comp.		finding but are not carried forward for analysis.)
			CRITICAL	ELEME	ENTS
PI	Air Quality	Belcher	09/09/08	PB	See analysis in EA.
NP	Areas of Critical Environ	nmental	9/16/08	JS	There are no Areas of Critical Environmental
	Concern	J. Stout			Concern in the proximity of the proposed
					project area.
NI	Cultural Resources	Wyatt	8/21/08	BBW	The cultural resource inventories are
					documented in reports #CR-08-33 and #CR-08-
					34. The only located cultural resource is an
					historic dump located within Section 23 that is
					not eligible to the National Register. Thus, no
					historic properties would be impacted.
NP	Environmental Justice	J. Stout	9/16/08	JS	According to the most recent Census Bureau
					statistics (2000), there are no minority or low
					income communities within the Kremmling
					Planning Area.
NP	Farmlands,		09/09/08	PB	There are no farmlands, prime or unique, in the
	Prime and Unique	Belcher			proximity of the proposed project area.
NP	Floodplains	Belcher	09/09/08	PB	The proposed wells are located in the uplands
					with no impacts to the floodplains.
NI	Invasive,	Scott	9/10/08	MS	There are no known weed infestations at the
	Non-native Species				proposed drill-hole locations. The BLM, in
					partnership with Jackson County, is ensuring
					that known weed infestations on public lands are
					being treated. The Proposed Action would cause
					surface disturbance that could result in the
					invasion and spread of noxious weeds.
				1	However, Diversified has recognized the

Pi				T	ı	T
Pi Migratory Birds McGuire 9/10/08 MM See analysis in EA.						potential for weed spread and would control the
Pi Migratory Birds McGuire 9/10/08 MM See analysis in EA.						
PI Migratory Birds McGuire 9/10/08 MM Sec analysis in EA.						
Migratory Birds						Diversified was also provided a copy of the
Migratory Birds McGuire 9/10/08 MM See analysis in EA.						approved seed mix (Attachment #2). Thus, there
Migratory Birds McGuire 9/10/08 MM See analysis in EA.						would be no impacts.
Native American Religious Concerns Wystt	PI	Migratory Birds M	1cGuire	9/10/08	MM	See analysis in EA.
Religious Concerns YTE, and Sensitive Species (Finding on Standard 4) PI Wastes, Hazardous And Solid PI Water Quality, Surface and Ground (Finding on Standard 5) PI Water Quality, Surface and Ground (Finding on Standard 5) PI Water Quality, Surface and Ground (Finding on Standard 5) PI Weter Quality, Surface and Ground (Finding on Standard 5) PI Weter Quality, Surface and Ground (Finding on Standard 2) PI Weter Quality, Surface and Ground (Finding on Standard 2) PI Weter Quality, Surface and Ground (Finding on Standard 2) PI Weter Quality, Surface and Ground (Finding on Standard 2) PI Wild and Scenic Rivers NP Wild and Scenic Rivers NP Wild and Scenic Rivers NP Wilderness Netrin NP Wilderness Netrin NP Wilderness NP Wildern	NP				BBW	
PI T/F., and Sensitive Species (Finding on Standard 4) McGuire			Wvatt			
Pi Wastes, Hazardous MeGuire	ΡΙ			9/10/08	MM	
PI Wastes, Hazardous Hodgson 9/02/08 KH See analysis in EA. PI Water Quality, Surface and Ground (Finding on Standard 5) Belcher				3,10,00	1,11,1	See unary sis in 21 ii
Pi Wild and Scenic Rivers Sterin 9/9/08 BGS Finding: The proposed action is located in the uplands. There are no eligible Wild and Scenic Rivers Sterin 9/9/08 BGS There are no eligible Wild and Scenic Rivers Sterin 9/9/08 BGS There are no eligible Wild and Scenic Rivers Sterin 9/9/08 BGS There are no eligible Wild and Scenic River Sterin 9/9/08 BGS There are no eligible Wild and Scenic River Sterin 9/9/08 BGS There are no eligible Wild and Scenic River Sterin 9/9/08 BGS There are no eligible Wild and Scenic River Sterin 9/9/08 BGS There is no designated Wilderness or Wilderness Study Areas in the proposed project area.	ΡΙ	, ,		9/02/08	KH	See analysis in EA
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No. Wetlands & Riparian Zones (Finding on Standard 2) Belcher	гі			09/09/08	FD	See analysis in EA.
Process	NII			00/00/09	DD	Finding. The property destinates in the
NP Wild and Scenic Rivers Sterin 9/9/08 BGS There are no eligible Wild and Scenic River Segments in the proposed project area.	NI			09/09/08	PB	
NP Wild and Scenic Rivers Sterin 9/9/08 BGS There are no eligible Wild and Scenic River segments in the proposed project area.		(Finding on Standard 2)	Beicher			-
NP Wilderness Sterin 9/9/08 BGS There is no designated Wilderness or Wilderness or Wilderness Study Areas in the proximity of the proposed project area. NON-CRITICAL ELEMENTS A finding must be made for these elements			G. •	0.10.10.3	D.C.	
NP	NP	Wild and Scenic Rivers	Sterin	9/9/08	BGS	
None						
Proposed project area. Proposed project ar	NP	Wilderness	Sterin	9/9/08	BGS	
NON-CRITICAL ELEMENTS (A finding must be made for these elements) PI						
PI Soils (Finding on Standard 1) Belcher O9/09/08 PB See analysis in EA.						
PI Vegetation (Finding on Standard 3) Torma 9/2/08 PT See analysis in EA.		NON-CI	RITICAL I	ELEMENTS	(A finding	must be made for these elements)
NP Wildlife, Aquatic (Finding on Standard 3) McGuire	PI	Soils (Finding on Standard 1)	Belcher	09/09/08	PB	See analysis in EA.
NP	PI	Vegetation		9/2/08	PT	See analysis in EA.
NP		(Finding on Standard 3)	Torma			·
PI Wildlife, Terrestrial (Finding on Standard 3) McGuire 9/10/08 MM See analysis in EA.	NP	Wildlife, Aquatic		9/10/08	MM	No aquatic wildlife present.
PI		_	McGuire			
NI Hydrology/Water Rights Selcher NI Paleontology Rupp Paleontology Rupp Paleontology Rupp Paleontology Rupp Paleontology Rupp Paleontology Rupp Paleontology Noise Monkouski Monkouski Monkouski Monkouski Monkouski Paleontologically inventoried on 8/27/08. Noise Monkouski Monkouski Monkouski Monkouski Monkouski Paleontologically inventoried on 8/27/08. Noise Monkouski Monkouski Monkouski Paleontology Paleontologically inventoried on 8/27/08. Paleontologically inventoried	ΡΙ			9/10/08	MM	See analysis in EA.
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	NI	Range Management	Torma	9/2/08	PT	
(Section 36). Allotment # 07067 is permitted						be developed in grazing allotment # 07067

				for 155 Animal-Unit-Months (AUMs) with a		
				grazing season of 4/1-4/30 and 6/1-8/30.		
				The Proposed Action would cause a reduction of		
				approximately 2.5 acres of available forage. The		
				loss of these acres would not cause a reduction		
				in the current AUM allocation or have an effect		
				on the ability of the permittee to continue to		
				graze this allotment as stated in his grazing		
				permit.		
NI	Lands/ Realty Authorizations	9/2/08	SC	There are no leases or permits in the location of		
	Cassel			the proposed actions. There is a ROW to		
				Marcus productions for an oil well. The		
				proposed Federal 36-3 is directionally drilling to		
				be sufficiently far enough away as to not		
				interfere with the current oil well.		
NI	Recreation Windsor	9/10/08	AW	The proposed ROW is in the KFO Extensive		
				Recreation Management Area. The area is used		
				for OHV and hunting activities. OHV activities		
				would not be affected by the proposed action.		
				Access would not be impacted for hunters so no		
				impacts are anticipated by the road construction.		
NI	Socio-Economics J. Stout	9/16/08	JS	There would be no socio-economic impacts.		
NI	Visual Resources Windsor	9/10/08	AW	The well and the ROW are both in VRM Class		
				IV. The proposed action would have no impact		
				to visual resource management objectives.		
NI	Cumulative Impact Summary	9/16/08	JS	See analysis in EA.		
	J. Stout					
	FINAL REVIEW					
	P&E Coordinator J. Stout	9/16/08	JS			
	Field Manager D. Stout					

Attachment #1

CONDITIONS OF APPROVAL FOR APPLICATIONS FOR PERMIT TO DRILL (APDs)

Operator: Diversified Operating Corporation (Diversified)

The Bureau of Land Management, Kremmling Field Office, address and telephone contacts are:

Address: 1116 Park Av., Kremmling, CO, 80459 Office Phone: (970) 724-3000 Fax: (970) 724-9590

Natural Resource Specialist: Kelly Hodgson, Office Phone (970) 724-3015

The Bureau of Land Management, Little Snake Field Office, address and telephone contacts are:

Address: 455 Emerson Street. Craig, CO, 81625 Office Phone: (970) 826-5000 Fax: (970) 826-5022

Petroleum Engineer: Stanley Eng, Office Phone (970) 826-5075
Petroleum Technician: Bob Eagan, Office Phone (970) 826-5093
Assistant Field Manager Jerry Strahan Office Phone (970) 826-5099

All lease and/or unit operations are to be conducted in such a manner to ensure full compliance with the applicable laws, regulations (43 CFR Part 3160), Onshore Oil and Gas Orders No. 1, 2, 3, 4, 5, 6 and 7, Notice to Lessees, and the approved plan of operations. Approval of this application does not relieve you of your responsibility to obtain other required federal, state, or local permits. A copy of the approved Form 3160-3 and the pertinent drilling plan, along with any advisory narratives and conditions of approval, shall be available at the drillsite to authorized representatives at all times. The operator is considered fully responsible for the actions of his subcontractors.

Your review and appeal rights are contained in 43 CFR 3165.3 and 3165.4.

CONDITIONS OF APPROVAL

STANDARD CONDITIONS

- 1. The Kremmling Field Office and the Little Snake Field Office (970) 826-5000 will be given 48-hour notification prior to commencing construction and/or reclamation work.
- 2. Notify Little Snake Field Office at (970) 826-5000 at least **48-**hours in advance to witness running and cementing of surface casing and testing of the BOPE.
- 3. The notice of spud will be reported orally to the Little Snake Field Office at (970) 826-5000 at least **48**-hours after spudding. This notice shall include spud date, time, details of spud (hole, casing, cement, etc.), API well number, and date the rotary rig was moved on location. If the spudding occurs on a weekend or holiday, wait until the following regular workday to make this report. The oral notice shall be followed by written notification within 5 working days.
- 4. No hazardous materials, hazardous wastes, or trash will be disposed of on public lands or on private surface overlying the oil and gas lease. If a release does occur, it will be reported to the Kremmling Field Office immediately at (970) 724-3000.
- The well-site disturbance area will be brush cleared and topsoil salvaged before any excavation or fill commences.
- 6. All survey stakes representing the leveled drill pad, the crest of excavations, the toe of embankments, the reserve pit, and the access road will be in place prior to construction. Staking shall include the well location, two 200-foot directional reference stakes, the exterior dimensions of the drill pad, reserve pit and other areas of surface disturbance, cuts and fills, and centerline flagging of new roads with road flagging being visible from one to the next.

- 7. Construction activities will not be allowed to commence if the topsoil cannot be separated from the subsoil during adverse environmental conditions (i.e. when soils are frozen or muddy).
- 8. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- 9. Drainage for runoff water will be provided to divert runoff water away from the reserve pit, cut and fill portions of the well location and the topsoil stockpile. Runoff water that concentrates and forms rills on the well location will be diverted and/or dispersed to prevent erosion of the fill slopes. Any ditches designed to provide runoff drainage will be constructed on a minimal grade and will release water onto undisturbed ground without causing accelerated erosion. The operator will take additional measures if erosion is occurring within the runoff water drainage system.
- 10. If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed timeframe. Operations will resume only upon written notification by the Authorized Officer.

STANDARD STIPULATIONS

- 11. If cultural or paleontological resources are discovered during exploration operations under this license, the licensee shall immediately notify the Field Officer Manager and shall not disturb such discovered resources until the Field Officer Manager issues specific instructions.
 - a. Within 5 working days after notification, the Field Office Manager shall evaluate any cultural resources discovered and shall determine whether any action may be required to protect or to preserve such discoveries.
 - b. The cost of data recovery for cultural resources discovered during exploration operations shall be borne by the licensee, if the licensee is ordered to take any protective measures. Ownership of cultural resources discovered shall be determined in accordance with applicable law.
 - c. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the Authorized Officer at (970) 724-3000. Within five working days the Authorized Officer will inform the operator as to:
 - 1. Whether the materials appear eligible for the National Register of Historic Places;
 - 2. The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again and,
 - d. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation, and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the operator will then be allowed to resume construction.
 - e. Pursuant to 43 CFR 10.4(g) (Federal Register Notice: Monday December 4, 1995, Vol 60, No. 232) the holder of this authorization must notify the Authorized Officer, by telephone (970) 724-3000, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Authorized Officer.
- 12. The reserve pit will be designed to exclude runoff water and maintain a 2-foot freeboard between the maximum

fluid level and the lowest point of containment. The reserve pit will not be used for disposal of any materials or fluids, except for materials or fluids specifically addressed in the drilling program or having a subsurface origin. If oil or oily substance is in the reserve pit, it must be removed within 30 days after the drilling rig is removed. Netting will be installed if oily substance is present in the reserve pit.

- 13. The perimeter of the reserve pit and production pits, if any, will be fenced with woven wire with 2 strands of barbed wire, properly spaced, on the top and all held in place by side posts and corner H-braces to inhibit entry by livestock and wildlife. The fence will be maintained until backfilling or removal of facilities occurs.
- 14. In the event downhole operations threaten to exceed the required 2-foot freeboard, regarding reserve pit fluids, immediate notification will be provided to the Authorized Officer with concurrent steps taken to minimize the introduction of additional fluids, until alternative containment methods can be approved.
- 15. Reserve pit fluids will be allowed to evaporate through one entire summer season (May-September) after drilling is completed, unless an alternative method of disposal is approved. After the fluids evaporate, the reserve pit mud will be allowed to dry sufficiently to allow backfilling. The backfilling of the reserve pit will be completed within 30 days after dry conditions exist and will meet the following minimum requirements:
 - a. Backfilling will be done in such a manner that the mud and associated solids will be confined to the pit and not squeezed out and incorporated in the surface materials.
 - b. There will be a minimum of 5 feet of cover, or return to approximate original contour on the pit.
 - c. When the work is completed, the pit areas will support the weight of heavy equipment without sinking and over time shall not subside over 6-inch depth.
- 16. If installed, production facilities will be located on cut portions of the existing drill pad.
- 17. In the event production is established, all land surfaces that are to remain free of vegetation (roads and well location) will be monitored for and protected from wind erosion; dry powdery soil will be treated to minimize wind erosion.
- 18. Prior approval is required to remove reserve pit fluids from the reserve pit; a request of this type will need to include the destination of the fluids and if the destination is not a State approved facility, the request will include State approval of the destination. Fluids may be moved to another reserve pit within the same field with verbal approval of the authorized officer.
- 19. All pits, cellars, rat holes and other bore holes unnecessary for further lease operations, excluding the reserve pit, will be backfilled immediately after the drilling rig is released. Pits, cellars and/or bore holes that remain on location must be fenced as specified for the reserve pit in the applicant's Surface Use Plan.
- 20. In the event a producing well is established, all new production equipment which has open-vent exhaust systems will be constructed in such a way to prevent the entry and perching of birds and bats.
- 21. All permanent structures (on-site for six months or longer) constructed or installed (including oil well pumpjacks) will be painted a flat, non-reflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with OSHA (Occupational Safety and Health Act) will be excluded.
- 22. Surface facilities should appear to blend in to the existing landscape to the greatest possible extent. Facilities should not be located on ridgelines or extend above them. Facilities should be minimal in size (or located underground) and colored and texture to blend in with the surroundings.
- 23. A containment berm must be installed around all storage tanks, including temporary tanks. Compaction and construction of the berm surrounding the tank or tank battery will be designed to prevent lateral movement of fluids through the utilized materials, prior to storage of fluids. The berm must be constructed to contain at minimum 110 percent of the storage capacity of the largest tank within the berm. All loading lines will be placed inside the berm.

24. Control of noxious weeds will be required through successful vegetation establishment and/or herbicide application. It is the responsibility of the lease operator to insure compliance with all local, state, and federal laws and regulations, as well as labeling directions specific to the use of any given herbicide.

RECLAMATION PERFORMANCE STANDARDS

25. The lessee is required to use the reclamation practices necessary to reclaim all disturbed areas. Reclamation will ensure surface and subsurface stability, growth of a self-regenerating permanent vegetative cover and compatibility with post land use. The vegetation will be diverse and of the same seasonal growth as adjoining vegetation. Post land use will be determined by the Authorized Officer but normally will be the same as adjoining uses.

Reclamation practices which must be applied or accomplished are: re-grading to the approximate original contour, effectively controlling noxious weeds, separating, storing and protecting topsoil for redistribution during final abandonment, seeding and controlling erosion. If topsoil is not present, or quantities are insufficient to achieve reclamation goals, a suitable plant growth media will be separated, stored and protected for later use. Reclamation will begin with the salvaging of topsoil and continue until the required standards are met. Topsoil that is stored for 1 year or longer will be seeded with naturally occurring species to retain topsoil vigor. If use of the disturbed area is for a short time (less than one year), practices which ensure stability will be used as necessary during the project, and reclamation, with the exception of vegetative establishment, will be completed within one year. If use of the area is for greater than one year, interim reclamation is required on the unused areas. Interim reclamation of the unused areas will begin immediately upon completion of the permanent facility(s).

For both short and long term projects vegetative establishment will be monitored annually. If the desired vegetation is not established by the end of the second growing season, practices necessary for establishment will be implemented prior to the beginning of the next growing season. Interim reclamation, unless otherwise approved, will require meeting the same standards as final abandonment with the exception of original contour.

Annual reports consisting of reclamation practices completed and the effectiveness of the reclamation will be provided to the Kremmling Field Office. The first report will be due in January following initiation of reclamation practices and annually thereafter until final abandonment is approved.

There are numerous reclamation practices and techniques that increase the success rate of reclamation and stabilization. With the exception of those stated above, it is the lessee's prerogative to use those they choose to accomplish the objective. Additional site specific mitigations may be specified and required. However, it is recommended that state-of-the-art reclamation, stabilization, and management practices be used to achieve the desired objective in a timely and cost-effective manner.

The following definitions and measurements will be used to accomplish and determine if reclamation has been achieved:

Permanent vegetative cover will be accomplished if the basal cover of perennial species, adapted to the area, is at lease ninety (90) percent of the basal cover of the undisturbed vegetation of adjoining land or the potential basal cover as defined in adjacent undisturbed areas.

Diversity will be accomplished if at least two (2) perennial genera and three (3) perennial species that are adapted to the area make up the basal cover of the reclaimed area in precipitation zones thirteen (13) inches or less. One species will not make up more than fifty (50) percent of the perennial vegetation by basal cover.

Self-regeneration and adaptation to the area will be evident if the plant community is in good vigor, there is evidence of successful reproduction, and the species are those commonly found in the area.

Surface stability will be accomplished if soil movement as measured by deposits around obstacles, depths of truncated areas, and height of pedestalling, is not greater than three tenths (0.3) of an inch and if erosion channels (rills, gullies, etc.) are less than one (1) inch in depth and at intervals greater than ten (10) feet.

If this standard is not met by the end of the second growing season, two alternatives exist depending on the severity of the erosion:

If erosion were greater than two (2) times the allowable amount, corrective action would have to be taken by the responsible company at that time;

If erosion is less than or equal to two (2) times the allowable amount, and it is determined the erosion occurred during vegetative establishment and the site may become stable, no corrective action would be required at that time. Another measurement would be performed a year later to determine if stability standards had been met. If the original measurements have not increased by more than the allowed standard, the standard would be considered met. However, if the increase were greater than the allowed standard, corrective action would be required.

Subsurface stability (mass wasting event) is of concern if disturbance has included excavation over four (4) feet in depth and greater than 10,000 square feet in area on slopes thirty five (35) percent and greater, or on any erosion-prone slope. When these conditions occur, length of liability for reclamation and final abandonment will continue for ten (10) years following re-contouring to original contour or for such time that climatic patterns provide two (2) consecutive years in which measurable precipitation totals at least 120 percent of average from October 1 through September 30, as measured by data averaged from nearby regional weather stations. The Authorized Officer may waive this stipulation, or portions of it. Such waiver will be documented and justified when not applicable, or when objectives are accomplished through another method.

SITE SPECIFIC CONDITIONS

Design Features of the Proposed Action (Applies to the APD and ROW):

- Any long-term topsoil piles stored longer than one year will be seeded. Topsoil must be of an adequate volume to spread to a 4-inch depth at final reclamation.
- Topsoil must be separated and stockpiling will not occur on the western side of the pad. Vegetation must be scraped simultaneously with the topsoil if the topsoil is stockpiled for more than 6 months.
- Diversified must obtain a storm-water permit or waiver from the state prior to drilling.
- The attached seed mix will be used for reclamation (Attachment #2).

Mitigation:

- If Diversified's drilling activity does not occur in the planned timeframe (September-October 2008), they will be required to consult with the BLM to discuss potential sage-grouse issues during the period of March 1 through June 30.
- Operator must provide the water source to be used for the wells. If the water source is not associated with an irrigation water right, then the applicant will need to join South Platte Water Related Activities Program to mitigate the potential impacts from the depletion.

REGULATORY REMINDERS

- A. This permit is valid for a period of one year from the date of approval. Any requests for extensions must be submitted prior to the end of the one-year period. If the permit terminates, any surface disturbance created under the permit must be rehabilitated in accordance with the approved plan within 90 days of termination, unless otherwise approved by the Authorized Officer. An expired permit may be reinstated at the Authorized Officer's discretion; however, future operations may require a new application be filed for approval.
- B. All drilling operations, unless otherwise specifically approved in the APD, must be conducted in accordance with Onshore Oil and Gas Order No. 2; Drilling Operations.
- C. All 7-Day Requirement responses are made part of this APD.
- D. There shall be no deviation from the proposed drilling and/or workover program as approved, without prior approval from the Kremmling and Little Snake Field Offices. Safe drilling and operating practices must be observed.

- E. Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease, which would entitle the applicant to conduct operations thereon.
- F. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the Kremmling and Little Snake Field Offices. If operations are to be suspended for more than 30 days, prior approval for certain well operations must be obtained and notification given before resumption of operations in accordance with 43 CFR 3162.3-2 and 3162.3-4.
- G. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval for subsurface abandonment operations may be granted by the Little Snake Field Office. Oral approvals must be confirmed in writing (Notice of Intention to Abandon (Form 3160-5)) within 15 days. Unless the plugging is to take place immediately upon receipt of oral approval, the appropriate resource area must be notified at least 48 hours in advance of the plugging of the well, in order to provide a representative the opportunity to witness plugging operations.
- H. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) must be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with Onshore Oil and Gas Order No. 1. Daily drilling reports, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations (with Form 3160-4) will be filed and sent to the Little Snake Field Office, 455 Emerson Street, Craig, Colorado 81625. Samples (cuttings, fluid, and/or gas) will be submitted only when requested by the Authorized Officer.
- I. Section 102 (b) (3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1 (c), requires that "not later than the fifth business day after any well begins production on which royalty is due anywhere on a least site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, or the date on which such production has begun or resumed."

The date on which a well commences production, or resumes production after having been off production for more than 90 days is to be construed as follows:

- 1. For an oil well, the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank or the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever occurs first;
- 2. For a gas well, that date on which gas is first measured through sales metering facilities or the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, whichever occurs first. For purposes of this provision, a gas well shall not be considered to have been off production unless it is incapable of production.

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c) (3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3163.2(e) (2).

- J. This APD is approved subject to the requirement that, should the well be successful (completed for production or recompleted for production in a new interval), the Little Snake Field Office must be notified when it is placed in a producing status. Such notification may be provided orally if confirmed in writing, and must be received in the Little Snake Field Office by not later than the 5th business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following information items:
 - 1. Operator name
 - 2. Well name, number, and location
 - 3. Date well was placed on production
 - 4. The lease, or communitized tract, or unit participating area to which the well's production is attributable.

- K. A separate Monthly Report of Operations, Form 3160-6, shall be submitted for each lease, unit participating area, or communitization agreement, beginning with the month in which drilling operation commence, in accordance with 43 CFR 3162.4-3. This report shall be sent to Minerals Management Service, Production Accounting Division, P.O. Box 17110, Denver, Colorado 80217.
- L. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation determined by the Authorized Officer.
- M. All produced liquids must be contained, including the dehydrator vent/condensate line effluent. All production pits must be bermed and fenced.
- N. Gas produced from this well may not be vented or flared beyond an initial, authorized test period of 30 days or 50 MMCF following completion, whichever comes first, without the prior written approval of the authorized officer. Should gas be vented of flared without approval beyond the authorized test period, you may be directed to shut the well in until the gas can be captured or approval to continue venting or flaring is granted and you may be required to compensated the lessor for that portion of the gas that was vented or flared without approval which is determined to have been avoidably lost.
- O. Produced water from newly completed wells may be temporarily disposed of into the reserve pit for a period of up to 90 days. During the 90-day periods, an application for approval of a permanent disposal method and location will be submitted according to Onshore Order No. 7 for approval.
- P. A schematic facilities diagram as required by CFR 43, Part 3162.7-5, shall be submitted to the Little Snake Field Office within 60 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 3162.7-5(b).
- Q. The permit holder is required to use certified weed free hay, straw and mulch on BLM lands in Colorado should the use or storage of hay, straw or mulch be necessary. Any person who knowingly and willfully violates this regulation may be subject to a fine of not more than \$1,000 or imprisonment of not more than 12 months, or both as defined in 43 USC 1733(a).

Attachment #2: Seed Mix

Drill Seeding Rate

SEED NAME	Application Rate PLS/Acre	Seeds/SQ. FT.
Grasses Western wheatgrass Pascopyrum smithii, variety. Arriba	2.97	7.5
Thickspike Wheatgrass Elymus lanceolatus var. Critana	2.13	7.5
Bluebunch wheatgrass Pseudoroegneria spicata, var. Secar (Alternate	2.51 var. Goldar)	7.5
Sheep fescue Festuca ovina, var. Covar	.62	7.5
Totall	8.23	30
Forbs		
Alfalfa var. Ladak	.73	3.5
Big sagebrush Artemesia tridentata ssp. wyomingensis	.06	3.5
Total	.79	7

^{*} Big sagebrush and Alfalfa may be seeded when it would be better for success * Broadcast seeds at twice the rate

(Seed tags must be submitted to BLM after seeding.)

* do not seed prior to October 1, to avoid sprouting.

MULCH

Native Hay or Straw 2,000 lbs. X acres =

-Mulch is optional but it will help reclamation results.
-Must be Certified Noxious Weed Free